National Science Foundation Directorate for Biological Sciences

Collaborative Research at Undergraduate Institutions

Program Announcement

Preproposal Deadline: January 15, 1999

Full-length Proposal Deadline: April 2, 1999

INTRODUCTION

The National Science Foundation (NSF) is charged with ensuring the vitality of the Nation's scientific and technological enterprise. Central to this mandate is a concern for the quality, distribution, and effectiveness of research and education in science and engineering. Integration of research and education is one of NSF's four core strategies designed to build a strong resource base for the Nation's programs in research and education. In order to help assure a broad base for research, NSF encourages research by faculty at predominantly undergraduate institutions. Such research contributes to basic knowledge in science and engineering, strengthens the quality of undergraduate education, provides a stronger foundation for graduate study and careers in science and engineering, and provides an opportunity for more effective integration of the excitement of scientific discovery into undergraduate education.

Increasingly, advances in research in the biological sciences depend on skills and knowledge that extend beyond traditional disciplinary boundaries. To encourage multidisciplinary research efforts at predominantly undergraduate institutions, the Collaborative Research at Undergraduate Institutions (C-RUI) Program was an initiative begun in 1995, targeted specifically toward developing collaborative research projects. This activity is a modification of the existing NSF-wide Research in Undergraduate Institutions (RUI) program (NSF 94-79). Research projects supported through C-RUI involve faculty members and undergraduate students of predominantly undergraduate institutions. They may either be carried out entirely within the predominantly undergraduate institution(s), or may be collaborative projects with institutions other than predominantly undergraduate institutions. The program will:

 Provide support for undergraduate faculty members to develop multidisciplinary research programs that enhance undergraduate education through quality hands-on research experiences.

- Encourage the development of multidisciplinary approaches to undergraduate science education and research.
- Provide equipment necessary to the predominantly undergraduate institution, to conduct the proposed research project.

FEATURES OF COLLABORATIVE RESEARCH GROUPS

The proposed collaborative research plan must focus on a research problem in biological sciences that is best approached from broad perspectives. A collaborative research group must consist of three or more faculty and up to ten undergraduates from the predominantly undergraduate institution(s).

Successful proposals will be those having a strong research plan integrated with a strong educational component, where development of multidisciplinary collaboration will enhance the research project, and where the project will contribute significantly to the education and training of undergraduates and to the institution(s) involved.

Proposals submitted to this competition are expected to have the following characteristics:

- The scientific merit of the proposed research must clearly be enhanced by development of the collaboration. A strong research activity is the heart of a successful collaborative group, and therefore the research plan is a crucial component of the proposal.
- The collaborative research project must be multidisciplinary in nature. Each collaborative group should take advantage of the strengths of its particular institution, justifying the multidisciplinary nature of the research in that context.
- The collaborative research project must integrate the research with more effective scientific education at the predominantly undergraduate institution(s). A description of the expected involvement of the participating faculty in new or modified course offerings or other educational activities must be a component of the plan.
- The research should enhance the research training of undergraduates actively involved in the project. To this end, the project must include explicit mechanisms by which the impact on students involved can be measured, including mechanisms for tracking progress of the students after graduation.
- The research project should enhance the research productivity of all faculty and student investigators involved. Measures of productivity must be described in the proposal, and may include research presentations by faculty and students at regional and national meetings, publications, and other scholarly works.

• Equipment purchased for the project must benefit the research and teaching environment specifically at the predominantly undergraduate institution, as well as be adequately justified for the proposed scientific research project.

ELIGIBILITY

Proposals must originate from United States predominantly undergraduate institutions: institutions exceeding graduate enrollment, and that have awarded no more than 20 Ph.D. or D.Sci. degrees in NSF-supported fields in the two years preceding proposal submission. For a fuller description of predominantly undergraduate institutions, see the current NSF *Guide to Programs* located on the NSF web site at http://www.nsf.gov/cgi-bin/getpub?nsf994. Proposals involving more than one academic institution are acceptable, but one predominantly undergraduate institution must have overall management responsibility. Collaborations between predominantly undergraduate institutions and other institutions may be proposed; however, all but one faculty member of the collaborative research group must come from predominantly undergraduate institutions. The student members of the research group must all come from the predominantly undergraduate institution(s). Details of multi-institutional collaborations must be discussed with the C-RUI Program Coordinator before submission.

The Directorate for Biological Sciences (BIO) does not support biological sciences research with disease-related goals, including studies on toxicology, epidemiology, or the etiology, diagnosis, or treatment of physical or mental disease, abnormality, or malfunction in human beings or animals. Studies of animal models for such conditions and the design or testing of drugs or procedures for their treatment are also not eligible for support.

PRINCIPAL INVESTIGATOR

The Principal Investigator must be the director of the collaborative research project and must be a faculty member of the submitting predominantly undergraduate institution. The director will have overall responsibility for the administration of the award and for discussions with NSF. The Principal Investigator and the submitting institution must include in the proposal an administrative plan explaining how year-round interactions will be encouraged between student members and faculty participants.

AWARD INFORMATION

Awards will be made for a period of three or four years. The proposal must contain an explicit justification for the proposed research and award duration. Annual budgets for collaborative research projects are expected to average \$200,000. In addition to the operating budget, a total of up to \$50,000 may be requested for the acquisition of well-justified research equipment at the predominantly undergraduate institution for the enhancement of the collaborative research project. The BIO Directorate expects to make up to 10 awards in FY 1999 pending the availability of funds, and to repeat the

competition on a biennial cycle pending the availability of funds. C-RUI expects to recommend awards in August 1999.

PROPOSAL SUBMISSION PROCESS

A two-stage proposal-submission process will be used for C-RUI. Applicants for a C-RUI award must first submit an abbreviated proposal (preproposal), A panel of experts will review the preproposals and will recommend approximately twenty of them for development into full proposals. Submission of a preproposal is required before a full-length proposal will be accepted.

INSTRUCTIONS FOR PREPROPOSAL AND FULL PROPOSAL SUBMISSION

Proposals (preproposals and full proposals) submitted in response to this program announcement must be prepared and submitted in accordance with the general guidelines contained in the *Grant Proposal Guide (GPG)*, NSF 99-2. The complete text of the *GPG* (including electronic forms) is available electronically on the NSF Web site at: (http://www.nsf.gov/cgi-bin/getpub?nsf992). Paper copies of the *GPG* may be obtained from the NSF Publications Clearinghouse, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov. Preproposals must be mailed to directly to the program. Full proposals must be submitted via the NSF FastLane System. Instructions and guidelines for the FastLane submission of proposals are detailed in "Instructions for Preparing and Submitting a Standard Proposal via FastLane" located at https://www.fastlane.nsf.gov/a1/newstan.htm. Also, see the "FASTLANE SUBMISSION" section below.

Proposers are reminded to identify the program announcement number (NSF 99-11) in the program announcement/solicitation block on the NSF Form 1207, "Cover Sheet for Proposal to the National Science Foundation." Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

Guidelines are provided for specific sections of the preproposal as follows:

- Cover Page (NSF Form 1207). In the box for Program Announcement/Solicitation No. enter NSF 99-11. Begin the title of the proposal with "Preproposal: ..."
- **Project Description** (maximum 5 pages). Include a brief description of the collaborative research project, including a description of its multidisciplinary theme, the research approach, the nature of the collaborations, the significance of the proposed research for the biological sciences, and its educational impact.

Include a separate **one page** list of faculty participants, and affiliations at the end of the Project Description. This is not included in the 5 page Project Description limitation.

- **Biographical Sketches.** Include brief biographical sketches for each faculty participant. Each biographical sketch is limited to two pages in length.
- Certification of C-RUI Eligibility (see Appendix A of this Program Announcement)
 -- The authorized institutional representative's signature on this page certifies that the submitting institution is a predominantly undergraduate institution. Reference mailing instructions below and in the "Proposal Due Dates" section of this announcement.

Preproposals not meeting these guidelines will be returned without review. Mail the original and five (5) copies of preproposals to:

Collaborative Research at Undergraduate Institutions Program – NSF 99-11 Division of Biological Infrastructure
National Science Foundation
4201 Wilson Boulevard, Room 615
Arlington, VA 22230

Prepare full-length proposals in accordance with the guidelines contained in the *GPG* (NSF 99-2) and these instructions. Use guidelines for group proposals (*GPG*, Chapter II, Section D.12.b).

Full proposals that do not conform to instructions will be returned without review. The Principal Investigator is responsible for the accuracy and completeness of the proposal as submitted.

Guidelines are provided for specific sections of the full proposal as follows:

• Cover Page (NSF Form 1207) -- In the NSF FastLane system follow instructions on proposal preparation. When completing the Cover Sheet click on the "Add Org Unit" button. Highlight "DIRECT FOR BIOLOGICAL SCIENCES" and click "OK". Scroll down to "DIV OF BIOLOGICAL INFRASTRUCTURE" and highlight "Collaborative Research at Undergraduate Institutions". Clicking "OK" designates this program as the NSF organizational unit of consideration.

In the box for Program Announcement/Solicitation No. enter NSF 99-11.

- **Project Summary.** This summary is used to inform the public about projects supported and should be addressed to the informed lay reader. It should be a brief (200 words or less), self-contained description of the research and education that would result if the project is funded and the significance of the research and education results for the biological sciences.
- **Project Description** (maximum 25 pages). This narrative description must not exceed 25 pages in length (including tables, figures, other graphic supplements, and the section on Results from Prior NSF Support, if applicable) and is the principal part

of the proposal. It is a detailed statement of the work to be undertaken and should include:

- **A.** The thematic basis of the collaboration underlying the research project.
- **B.** A section entitled *Results from Prior NSF Support* (if any of the participating faculty members has held an NSF award for research or instrumentation within the last five years). If more than one of the participants has held an NSF award, this section should describe the single project most relevant to the proposed new project. This section must describe the earlier project and its outcomes in sufficient detail to allow reviewers to judge the scientific value of the results achieved in the previous NSF project. This part of the project description must not exceed five pages.
- C. Objectives for the work and its expected significance; relation to the long-term goals of the PIs; relation to the present state of knowledge and to work in progress in the field; description of the general plan of the work, including experimental methods and analysis and, if appropriate, plans for archival materials or datasharing. This description must contain sufficient detail to allow the reviewers to assess the scientific merit of each component of the project.
- **D.** A description of the expected contribution of each of the faculty members to the proposed research project, to allow reviewers to evaluate the rationale and potential for developing the collaboration.
- **E.** A description of how student year-round involvement in the research project and in the presentation of research results will be fostered, how the equipment, if requested, will enhance research by undergraduates, and how the research will be made relevant to the students' educational goals.
- Education and Training (maximum length 5 pages). Describe the expected impact of the proposed research project on the undergraduate students involved in the project and at the undergraduate institution as a whole. It should include a description of the plans to attract qualified undergraduate students to the project, the criteria for their selection, and any provisions that will increase the participation of groups underrepresented in science. It must also include a description of the mechanisms by which the effect of participation in the project on the academic careers of participating students will be measured both during their undergraduate careers and after graduation. Finally, the proposal must include a description of the way in which participation of the collaborating faculty in the project will produce long-lasting changes on the curriculum at the predominantly undergraduate institution.

Include this component, as a separate section labeled Education and Training, at the end of the Project Description file. This section may not exceed five pages and is not included in the 25 page limitation of the Project Description.

- **References Cited.** A bibliography of cited research literature is required; complete references, including titles, must be listed. See *GPG* (NSF 99-2), Chapter II, Section D.5.
- **Biographical Sketches.** For each faculty member of the collaborative research group, provide a brief curriculum vitae or biographical sketch, a list of up to five publications relevant to the proposed project and five other publications, and a comprehensive list of collaborators. The collaborator list is used in identifying potential conflicts of interests for reviewers, and must include graduate and postdoctoral advisors, graduate students and postdoctoral students supervised, and all research collaborators or co-authors within the past four years. Each Biographical Sketch may not exceed two pages. See *GPG* (NSF 99-2), Chapter II, Section D.6.
- **Budget** (**NSF Form 1030**). Provide a budget page for each year of support requested. Allowable costs may include: stipends for up to 10 undergraduate students; travel to meetings for both faculty and student members; support for technical assistants; summer salary (up to 2/9 academic-year salary) for faculty members; supplies necessary to accomplish the research project; publication costs; other direct costs, if justified; and indirect costs. Funds for added instrumentation necessary to accomplish the research project should be included in section D (Equipment). See *GPG* (NSF 99-2), Chapter II, Section D.7.
- **Budget Justification.** A brief justification for funds in each budget category should be provided. For instrumentation, a particular model or source of equipment and a current or expected price should be specified whenever possible. A brief explanation for specific choices of equipment should also be provided. **This section of the proposal must not exceed two pages in length.**
- **Current and Pending Support.** List all sources of current and pending research support for each of the faculty members of the collaborative research group.
- Facilities, Equipment and Other Resources. Briefly describe existing facilities and equipment available to the collaborative research group. Where requested equipment duplicates existing items, provide a justification for the duplication. Describe arrangements for maintenance and continuing support of new and existing instrumentation and facilities.
- **BIO Proposal Classification Form (PCF).** Complete the BIO PCF, available on the NSF FastLane system. The PCF is an on-line coding system that allows the Principal Investigator to characterize his/her project when submitting proposals to the Directorate for Biological Sciences. Once a PI begins preparation of his/her proposal in the NSF FastLane system and selects a division, cluster, or program within the Directorate for Biological Sciences as the first or only organizational unit to review the proposal, the PCF will be generated and available through the Form Selector

screen. Additional information about the BIO PCF is available in FastLane at http://www.fastlane.nsf.gov/a1/BioInstr.htm.

• Certification of C-RUI Eligibility -- Mail the Certification of C-RUI Eligibility (see Appendix A of this Program Announcement). The authorized institutional representative's signature on this page certifies that the submitting institution is a predominantly undergraduate institution. Reference mailing instructions in the Proposal Due Dates section of this announcement.

PREPROPOSAL AND PROPOSAL DUE DATES

• Preproposals must be received by January 15, 1999. Mail the original and five (5) copies to the program at the following address:

Collaborative Research at Undergraduate Institutions Program – NSF 99-11 Division of Biological Infrastructure National Science Foundation 4201 Wilson Boulevard, Room 615 Arlington, VA 22230

• Full proposals must be sent by 5:00 p.m., submitters, local time, April 2, 1999 via the NSF FastLane system. Full proposals will be accepted only from applicants who have submitted preproposals. Unless requested by NSF, additional information may not be sent following proposal submission. Copies of the signed proposal cover sheet, the Certification of C-RUI Eligibility (see Appendix A), and the BIO classification form must be submitted in accordance with the instructions identified below.

Mail the following materials directly to Collaborative Research at Undergraduate Institutions (C-RUI) program:

- a paper copy of the cover sheet, including the certification page (page 2 of 2) signed by the PI and an institutional representative;
- the Certification of C-RUI Elibibility, and
- the BIO classification form.

The mailed materials must be received by April 9, 1999 for full proposals. Send materials to:

Collaborative Research at Undergraduate Institutions Program – NSF 99-11 Division of Biological Infrastructure
National Science Foundation
4201 Wilson Boulevard, Room 615
Arlington, VA 22230

Do not mail copies of the full proposal. NSF will make the appropriate number of

copies of the proposal.

FASTLANE SUBMISSION

In order to use NSF FastLane to prepare and submit a proposal, you must have the following software: Netscape Navigator 3.0 or above, or Microsoft Internet Explorer 4.01 or above; Adobe Acrobat Reader 3.0 or above for viewing PDF files; and Adobe Acrobat 3.X or Aladdin Ghostscript 5.10 or above for converting files to PDF.

To use FastLane to prepare the proposal your institution needs to be a registered FastLane institution. A list of registered institutions and the FastLane registration form are located on the FastLane Home Page. To register an organization, authorized organizational representatives must complete the registration form. Once an organization is registered, PIN for individual staff are available from the organization's sponsored projects office.

To access FastLane, go to the NSF Web site at http://www.nsf.gov, then select "FastLane," or go directly to the FastLane home page at http://www.fastlane.nsf.gov/. Please see "Instructions for Preparing and Submitting a Proposal to the NSF Directorate for Biological Sciences" located at http://www.fastlane.nsf.gov/a1/BioInstr.htm. Additionally, read the "PI Tipsheet for Proposal Preparation" and the "Frequently Asked Questions about FastLane Proposal Preparation," accessible at https://www.fastlane.nsf.gov/a1/A1Prep.htm.

IMPORTANT NOTE: For technical assistance with FastLane, please send an e-mail message to <u>biofl@nsf.gov</u>. If you have inquiries regarding other aspects of proposal preparation or submission, please send an e-mail message to <u>c-rui@nsf.gov</u> before the deadline dates for submission.

MERIT REVIEW

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest at the time of submission, the names of appropriate or inappropriate reviewers. Special care is taken to ensure that reviewers have no immediate and obvious conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority serving institutions, adjacent disciplines to that principally addressed in the proposal, first time NSF reviewers, etc.

Proposals will be reviewed against the following general merit review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Each reviewer will be asked to address only those that are relevant to the proposal and for which he/she is qualified to make judgments.

1. What is the intellectual merit of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field and across different fields? How well qualified is the proposer (individual or team) to conduct the project? To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

2. What are the broader impacts of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Integration of Research and Education

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learner perspectives. PIs should address this issue in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give it careful consideration in making funding decisions.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports. PIs should address this issue in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give it careful consideration in making funding decisions.

Additional Merit Review Information

Preproposals will be reviewed by an external advisory panel. Following this review, approximately 20 applicants with promising projects will be invited to submit full-length proposals. Applicants should be aware that the comments of preproposal reviewers will be considered during the review of full-length proposals. It is expected that applicants will be notified by February 24 about the decisions on preproposals. Full proposals will be evaluated by ad hoc (mail) reviewers as well as by a multidisciplinary panel.

GRANT AWARD AND ADMINISTRATION INFORMATION

Notification of the Award

Notification of the award is made *to the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator.

Grant Award Conditions

Grants awarded as a result of this announcement are administered in accordance with the terms and conditions of NSF GC-1, "Grant General Conditions," or FDP-III, "Federal Demonstration Project General Terms and Conditions," depending on the grantee organization. Copies of these documents are available at no cost from the NSF Clearinghouse, P.O. Box 218, Jessup, Maryland 20794-0218, telephone (301) 947-2722, or via e-mail to pubs@nsf.gov. More comprehensive information is contained in the NSF *Grant Policy Manual* (NSF 95-26), available on the NSF OnLine Document System located at http://www.nsf.gov/, or for sale through the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after expiration of a grant, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for the PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented a new electronic project reporting system, available through FastLane, which permits electronic submission and updating of project reports, including information on: project participants (individual and organizational); activities and findings; publications; and, other specific products and contribution. Reports will continue to be required annually and after the expiration of the grant, but PIs will not need to re-enter information previously provided, either with the proposal or in earlier updates using the electronic system.

Effective October 1, 1998, PIs are required to use the new reporting format for annual and final project reports. PIs are strongly encouraged to submit reports electronically via FastLane. For those PIs who cannot access FastLane, paper copies of the new report

formats may be obtained from the NSF Clearinghouse as specified above. NSF expects to require electronic submission of all annual and final project reports via FastLane beginning in October, 1999.

New Awardee Information

If the submitting organization has never received an NSF award, it is recommended that the organization's appropriate administrative officials become familiar with the policies and procedures in the NSF *Grant Policy Manual* which are applicable to most NSF awards. The "Prospective New Awardee Guide" (NSF 97-100) includes information on: Administration and Management Information; Accounting System Requirements and Auditing Information; and Payments to Organizations with Awards. This information will assist an organization in preparing documents that NSF requires to conduct administrative and financial reviews of an organization. The guide also serves as a means of highlighting the accountability requirements associated with Federal awards. This document is available electronically on NSF's Web site at http://www.nsf.gov/cgi-bin/getpub?nsf97100.

ADDITIONAL INFORMATION

General inquiries should be made to:

C-RUI Program Coordinator for Biology Division of Biological Infrastructure, Room 615 National Science Foundation 4201 Wilson Boulevard Arlington, VA 22230 Tel: (703) 306-1469

Fax: (703) 306-0356 email: c-rui@nsf.gov

APPENDIX A

CERTIFICATION OF C-RUI ELIGIBILITY

[This certification, executed by an Authorized Institutional Representative, must appear in both the Preproposal and Full-Length Proposal. Print this page and mail as instructed in the "Proposal Due Dates" section above.]

By submission of this proposal, the institution hereby certifies that the originating and managing institution is an institution that offers courses leading to a bachelor's or master's degree, but has awarded no more that 20 doctoral degrees in NSF-supported disciplines in the two years preceding proposal submission.	
Signature of Authorized Institutional Representative	Date
Typed Name and Title:	

GENERAL INFORMATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers, and educators. The Foundation strongly encourages women, minorities, and persons with disabilities to compete fully in its programs. In accordance with federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving financial assistance from NSF. Some programs may have special requirements that limit eligibility.

Facilitation Awards for Scientists and Engineers with Disabilities (NSF 91-54) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation regarding NSF programs, employment, or general information. TDD may be accessed at (703) 306-0090; FIRS at 1-800-877-8339.

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested may be disclosed to qualified reviewers and staff assistants as part of the review process; to applicant institutions/grantees to provide or obtain data regarding the proposal-review process, award decisions, or the administration of awards; to government contractors, experts, volunteers, and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 Federal Register 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 Federal Register 268 (January 5, 1998). Submission of the

information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

Public reporting burden for this collection of information is estimated to average 120 hours per response, including the time for reviewing instructions. Send comments regarding this burden estimate and any other aspect of this collection of information, including suggestions for reducing this burden, to: Reports Clearance Officer; Information Dissemination Branch, DAS; National Science Foundation; Arlington, VA 22230.

The program described in this announcement is in the category 47.074 (BIO) of the Catalog of Federal Domestic Assistance.

YEAR 2000 REMINDER

In accordance with Important Notice No. 120 dated June 27, 1997, Subject: Year 2000 Computer Problem, NSF awardees are reminded of their responsibility to take appropriate actions to ensure that the NSF activity being supported is not adversely affected by the Year 2000 problem. Potentially affected items include computer systems, databases, and equipment. The National Science Foundation should be notified if an awardee concludes that the Year 2000 will have a significant impact on its ability to carry out an NSF-funded activity. Information concerning Year 2000 activities can be found on the NSF Web site at http://www.nsf.gov/oirm/y2k/start.htm.

P.T. 34 K.W. 1002000 OMB 3145-0058 NSF 99-11 (Replaces 96-116)